(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 21 April 2005 (21.04.2005)

(10) International Publication Number WO 2005/035216 A1

(51) International Patent Classification⁷:

B29B 17/00

(21) International Application Number:

PCT/AU2004/001389

(22) International Filing Date: 12 October 2004 (12.10.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2003905590

13 October 2003 (13.10.2003)

(71) Applicant (for all designated States except US): CYCLO-PLAS HOLDINGS PTY LTD [AU/AU]; 21 Riverside Drive, Ballina, NSW 2478 (AU).

(72) Inventors; and

- Inventors/Applicants (for US only): LARK, David, James [AU/AU]; 18 Cedar Street, Woodburn, NSW 2472 (AU). HOWELL, William, Alexander [AU/AU]; 21 Riverside Drive, Ballina, NSW 2478 (AU).
- (74) Agent: ALLENS ARTHUR ROBINSON PATENT & TRADE MARKS ATTORNEYS; The Chifley Tower, 2 Chifley Square, Sydney, NSW 2000 (AU).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROCESS FOR RECYCLING WASTE PLASTICS

(57) Abstract: A process for recycling plastic material by reducing a sample of plastic material to form plastic particles having a desired particle size; providing a susceptor agent to the plastic particles which imparts a dielectric property to the plastic particles; providing a bonding agent to the plastic particles; and treating the plastic particles with microwave energy to form a useable plastic material.